

Congress toughens drinking water rules

In passing the Safe Drinking Water Act in 1974, members of Congress thought they had set in action a program to establish ceilings on the allowable levels of all serious contaminants entering drinking water supplies and a program of water monitoring to ensure that tap water was safe. But "the Act has failed miserably," according to Sen. Dave Durenberger (R-Minn.), who chairs the subcommittee on toxic substances and environmental oversight. To make the act perform as intended, the House and Senate have crafted a spate of new amendments to strengthen the law. With their passage by the House on May 13 and the Senate on May 21, these amendments become the first major environmental package to clear the 99th Congress. They await the President's signature to become law.

According to Durenberger, who shepherded the amendments through the Senate, the existing law has suffered from imprecise regulatory language, inaction by the Environmental Protection Agency (EPA) and the Reagan administration's apparent attempts to stall EPA compliance with the act. The new package of amendments contains seven major provisions that not only strengthen the act but also expand EPA's responsibilities.

For instance, in the act's 12-year history EPA has set standards for only 23 contaminants — a record Durenberger describes as "miserable, discouraging [and] disturbing." Moreover, he says, many of the 23 were merely rubber-stamped adoptions of standards set earlier by the Public Health Service. The new amendments give EPA three years to set up limits on allowable concentrations of 83 additional contaminants. Unlike the current law, the amendments allow use of civil lawsuits to compel EPA to implement those standards if the agency begins slipping behind the mandated deadlines.

In discussion of the amendments on the Senate floor last week, Durenberger conceded that listing which contaminants to regulate and setting a timetable for the implementation of those rules "is not normally a legislative function. But the history of the drinking water program more than justifies the use of lists and deadlines by the Congress to assure that standards are actually established and at the earliest possible date."

The amendments also call for:

- establishing technical benchmarks, cleanup capabilities that must be matched by any decontamination technologies a drinking water supplier chooses to employ. For example, the amendments note that granular activated carbon (GAC) is effective and affordable for use in filtering organic chemicals from water. If GAC were used as a benchmark, its effectiveness would

set the minimum standard of how well organic chemicals would have to be removed.

- requiring the use of water filtration and disinfection for surface water (as opposed to groundwater) that is not adequately protected from contamination.

- monitoring water-supply systems at least every five years for the presence of regulated contaminants and a host of other contaminants that EPA considers potentially toxic.

- providing federal funds and technical water-monitoring assistance to small public water-supply systems that cannot afford the expertise to follow through on the monitoring and analysis requirements of the new proposals.

- immediate banning of lead pipes and solder in new plumbing that will carry drinking water.

- initiating a new program to protect groundwater. The program would fund demonstration projects to protect groundwater-recharge lands — where the affected groundwater would be the "sole [possible] source" of drinking water to a local region — from chemical contamination. It would also withhold federal funds for groundwater protection when EPA determined that a state's plan for groundwater protection would not be

effective.

Environmental groups are generally pleased with the proposed changes to the drinking water law, according to Jacqueline Warren of the New York City-based Natural Resources Defense Council. One reason, she says, is that the 83 new contaminant standards will increase the number of pollutants that can be regulated under both the Superfund law and Resource Conservation and Recovery Act, since both require that water contaminated with chemical wastes meet Drinking Water Act standards. The biggest omission in the new legislative package is a ceiling on the allowed concentrations of "total organic contamination," according to Warren and Velma Smith of the Washington, D.C.-based Environmental Policy Institute. By setting standards only for individual pollutants, the act will not protect against combinations of chemicals whose toxic effects are additive or synergistic, they say.

Smith says that although the President is rumored to be unhappy with these amendments, he is expected to sign them into law. The reason? The amendments passed both the House and Senate by such vast majorities, she notes, that an override of any veto is likely. White House officials contacted by SCIENCE NEWS refused to comment on the matter.

— J. Raloff

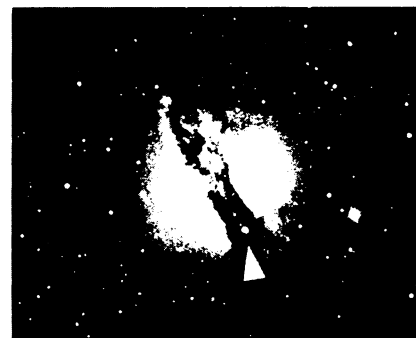
Serendipity: Supernova in Centaurus A

Supernovas — giant stellar explosions — are not particularly rare in the universe. They are a staple item for Astronomical Telegrams, astronomers' system for quick notification of new developments. Highly active galaxies are also fairly numerous. However, the combination — a supernova in an active galaxy — is much rarer. And when the galaxy is the nearest active galaxy to us, Centaurus A, which also happens to be one of the strongest and longest studied celestial sources of radio waves, the combination provides a rather unique excitement for astronomers.

The current supernova, officially designated supernova 1986G, was first reported on May 4 by Robert Evans, an amateur astronomer in Hazelbrook, New

South Wales, Australia, and confirmed by observers at the Anglo-Australian Telescope at Siding Spring Mountain in New South Wales. Centaurus A, also known as NGC 5128, is visible only from the Southern Hemisphere. Observatories there have been turning toward it: The National Optical Astronomy Observatories say all major telescopes at their Cerro Tololo Inter-American Observatory near La Serena, Chile, are observing it, an unusual concentration of resources on a single object for a major observatory.

According to Mark Phillips of Cerro Tololo, the supernova's maximum brightness occurred about a week after it was detected. To better understand how supernovas happen, astronomers want to find them before maximum light, while



NOAO
Centaurus A before (left) and after supernova.